

HOV Planning and Policy Development in Ontario

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Thank you for the opportunity to discuss HOV planning and policy development in Ontario. This paper focuses mainly on our activities in the Greater Toronto Area. I will describe the activities of the Provincial government, while Tom Mulligan will discuss the efforts of the Municipality of Metropolitan Toronto.

The Greater Toronto Area (GTA) is the largest urban region in Ontario and indeed the whole of Canada. The GTA accounts for 40 percent of the population and 50 percent of the economic base of the Province. Obviously, an effective and efficient transportation system is necessary to serve the social and economic needs of this region. The Greater Toronto Area contains five regional municipalities-Halton, Peel, York, Durham and Metropolitan Toronto-and thirty local municipalities. The GTA extends about 100 miles east-west and 80 miles north-south. The population is approximately four million, and this is forecast to grow to over six million in the next 30 years. Currently one-half of the population lives in Metropolitan Toronto.

The transportation system in the Toronto area includes roads, highways, rapid transit, commuter rail, and an extensive bus system. The Province is responsible for building and operating the highway system; GO Transit, a provincial agency operates the commuter rail system; and the Province and the municipalities share the capital and operating costs of municipal roads and transit. The total provincial/municipal capital funding for transportation in the GTA is approximately \$1 billion/ year.

There are many current and future trends that led the province to examine the High Occupancy Vehicle (HOV) option. First, there is an increasing congestion on the road system. Secondly, an increasing share of the growth is occurring in suburban areas, which in turn leads to a large growth in interregional travel as well as intra-regional travel in the regions surrounding Metro Toronto.

These trends are expected to continue and to become more significant problems in the next 30 years. The increased travel demand cannot be accommodated by road expansion alone due to limited rights-of-way as well as social and environmental considerations, while transit cannot address all of the suburban travel growth because of the dispersed nature of the demand and cost considerations.

These were some of the factors that led to Ontario's HOV policy, which was announced two years ago. Prior to this, the Province had been actively involved in promoting ride sharing and assisting municipal HOV lane development. With the announcement of the policy, the Province has initiated actions that would lead to HOV facilities on provincial highways. The Province is also taking a much more comprehensive, deliberate, and proactive approach towards the development of an integrated provincial/municipal HOV system in the GTA.

The Ontario HOV policy formally recognizes the importance of HOV facilities in addressing future transportation, environmental, social, and economic needs. The policy emphasizes collaboration with other levels of government, transit operators, and the private sector in developing these systems. The critical importance of support programs are also recognized. The objective of the Ontario HOV system is to complement and enhance the transit systems, not to compete with them. The HOV systems can also play a strong role in forming a transit habit among commuters and can serve as a precursor to future rapid transit facilities.

Ontario is taking a combined opportunity-based and traditional planning approach to the development of the HOV lane systems. To date, four major freeway corridors have been studied to determine the need and feasibility of providing HOV lanes. Preliminary or detail design is under way on three of these corridors. A few additional issues are being examined in the fourth corridor. All four corridors were identified to be viable from an HOV demand standpoint. Studies will soon be initiated on three additional corridors. An HOV network study, which will cover the entire GTA region, will also be initiated soon. A provincial/municipal committee has been established to provide leadership, coordination, and communication on HOV programs and issues. A funding strategy for HOV facilities has been established and a strategy to address the support programs is being developed.

The long-term vision for the HOV system in the Toronto area includes HOV lanes on all major highways. The HOV lanes on highways and on arterial streets would be well integrated. The physical facilities would be supported by appropriate programs and policies to ensure their effective use. The HOV and transit networks would be well coordinated to complement each other provide better service to the user. The HOV network would

enable buses to run faster and operate more efficiently, making bus transit more attractive to users.

Tom Mulligan, Municipality of Metro Toronto



It is a pleasure to have the opportunity to discuss HOV planning and development activities from the perspective of the Municipality of Metropolitan Toronto. The philosophy of the municipality differs slightly from that of the Province. We are concerned with the arterial street network rather than the Provincial Highway system. The roadway network in our area is maturing, resulting in a limited ability to respond to the growing travel demands. One approach being pursued by the Municipality is trying to change commuter travel behavior from driving alone to using HOVs—including transit, carpools, vanpools-and bicycles and walking.

Most major urban areas in Ontario have experienced significant growth over the past 25 years. Much of this growth has been in low density suburban areas. This has resulted in severe congestion in many areas. This trend is expected to continue unless major changes occur. Arterial street HOV lanes can help address suburban traffic congestion by focusing on person movement rather than vehicular movement. HOV lanes can also provide priority to buses, thereby improving reliability and operating speeds.

The emphasis of the approach being taken in Toronto is to make the arterial system more efficient by giving HOVs priority over single-occupancy vehicles. The HOV lane system plan has been developed by examining potential opportunities for enhancement and by maximizing resources. The result is a proposed grid network HOV lane on our major arterial roads.

To maximize the person carrying capacity of the roadway network, transit operations should be a major consideration in any HOV project. Most of the arterial street HOV lanes in Toronto utilize the curb lane to provide easy bus access. The eligibility of other HOVs and the vehicle occupancy requirements depend on how

many buses are anticipated to use the lane. For example, with the high bus volumes on many HOV lanes in Toronto, only 3 + carpools and vanpools will be allowed to use the lanes. In areas with less bus service, a 2+ vehicle occupancy requirement may be used.

The HOV system developed by the Municipality of Metropolitan Toronto follows the arterial street grid network. The proposed network of HOV lanes will penetrate most suburban areas and will connect major employment and residential areas. The HOV lanes will be integrated with the existing rapid transit lines in the region and in some cases may act as precursors for rapid rail facilities. It is anticipated that the development of the HOV system will take about 25 years.

It was recognized early in the development of the HOV program that in addition to the HOV lanes, a number of support programs and facilities needed to be provided to help promote use. Ridesharing programs are being implemented in a number of areas. One approach includes a ride matching pilot study in a suburban office park. Other programs provide preferential parking for HOVs at subway station park-and-ride lots, travel information centers at shopping malls and office buildings, and assisting employers establish their own ridesharing systems.

To ensure that the public understands and supports the arterial street HOV lanes, special attention is being paid to public awareness and marketing programs. An effective enforcement program is also critical to insure that the public perceives the lanes are being properly used. High violation rates will work against future HOV programs.

In conclusion, the Province and the municipalities are very supportive of HOV facilities and programs. All groups are working together to plan, design, operate, and enforce a system of HOV facilities that will address the growing issues of traffic congestion and will enhance the quality of life in the region.